| Index of Claims                                       | Application No. | Applicant(s)        |
|---|-----------------|---------------------|
| BBIRT HBIR BBITE BINK IBBIE IBNIK BIRTI LENG BRITI IB | 10/679,686      | O'BRIEN, FRANCIS J. |
|   | Examiner        | Art Unit            |
|   | Hal D Wachsman  | 2857                |

| √ | Rejected | _ | (Through numeral)<br>Cancelled | Z | Non-Elected  | Α | Appeal   |
|---|----------|---|--------------------------------|---|--------------|---|----------|
| = | Allowed  | ÷ | Restricted                     | _ | Interference | 0 | Objected |

| Claim Date |            |              |              |          | ::           | Cla  | Claim        |   |                 | Date |       |           |          | · :             | Claim   |              | Date                |        |          |              |        |       |          |          | $\neg$   |          |               |              |          |  |   |          |
|------------|------------|--------------|--------------|----------|--------------|--|--------------|---|-----------------|------|-------|-----------|----------|-----------------|---------|--------------|---------------------|--------|----------|--------------|--------|-------|----------|----------|----------|----------|---------------|--------------|----------|--|---|----------|
|            | <u>-</u>   | 1            |              |          |              |  |              |   |                 |      |       |           | 3        |                 |         |              |                     |        |          | Г            |        |       | ٦        |          | T        |          |               |              |          | $\exists$                                      |   | ٦        |
| Final      | Original   | 1-18-0       | }            |          |              |  |              |   | i               |      |       | Final     | Original |                 |         |              |                     |        |          |              |        | Final | Original |          |          | ł        | Ī             |              |          |  |   |          |
| 谨          | Ę,         | 30           | ŀ            |          |              |  |              |   |                 |      |       | 這         | įį       |                 |         |              |                     |        | 1        |              |        | Ξ̈́   | iğ       |          |          |          |               |              | l        |  |   |          |
|            |            | 1            |              |          |              |  |              |   |                 |      |       |           | 0        |                 |         |              |                     |        | -        |              |        |       | ٠ ا      |          |          | ı        | ł             | - 1          | į        |  |   |          |
|            | <b>a</b> ) | 11           |              |          |              | Ī.,  |              |   |                 |      |       |           | 51       |                 | T       |              |                     |        |          |              |        |       | 101      |          | Т        | $\neg$   | $\neg$        |              |          | $\neg$   | T   | $\neg$   |
|            | 2          | =            |              |          |              | Τ  |              |   |                 |      |       |           | 52       |                 |         |              |                     |        |          |              |        |       | 102      |          |          |          |               |              |          | $\top$   |   | $\neg$   |
|            | 3          | Ξ            |              |          |              |  |              |   |                 |      | .: :  |           | 53       |                 | T       |              |                     |        |          |              |        |       | 103      |          |          |          |               |              |          | T  | T   | ╗        |
|            | 4          | 1.1          |              |          |              |  | Γ            |   |                 |      |       |           | 54       |                 |         |              |                     |        |          |              |        |       | 104      |          |          |          |               |              |          | $\neg$   | Т   | ٦        |
|            | 5          | 1.1          |              |          | L            |  |              |   |                 |      |       |           | 55       |                 |         |              |                     |        |          |              |        |       | 105      |          |          |          |               |              |          | $\Box$   | Т   |          |
|            | 6          | 1.           |              |          |              |  |              |   |                 |      |       |           | 56       |                 |         |              |                     |        |          |              |        |       | 106      |          |          |          |               |              |          | $\Box$   | $\Box$  |          |
|            | 7          | 7            |              |          |              |  |              |   |                 |      |       |           | 57       |                 |         |              |                     |        |          |              | : :    |       | 107      |          |          |          |               |              |          | $\Box$   | $\Box$  |          |
|            | 8          | -            |              |          |              |  |              |   |                 |      |       |           | 58       |                 |         |              |                     |        |          |              | :      |       | 108      |          |          |          |               |              |          | $\sqcup$                                       |   |          |
| <u></u>    | 9          | ح            |              |          | L            | L  | L            | L                                       |                 |      |       |           | 59       |                 |         |              |                     |        |          |              | 11     |       | 109      |          |          |          |               |              |          | $\bot$   |   |          |
|            | 10         | 1,           |              |          |              |  |              |   |                 |      | 1     |           | 60       |                 |         |              |                     |        |          |              |        |       | 110      |          |          |          |               |              |          | $\prod$  |   |          |
|            | 11         | ĩ            |              |          | L            |  |              |   |                 |      | .     |           | 61       |                 |         |              |                     |        |          |              |        |       | 111      |          |          | $\Box$   | $\Box$        | _]           |          | $\prod$  | I   |          |
|            | 12         | ī            |              |          |              |  |              |   |                 |      |       |           | 62       |                 |         |              |                     |        |          |              |        |       | 112      |          | $\Box$   |          |               | _[           |          | $\Box$   | $\Box$  |          |
|            | 13         | 7            |              |          |              |  |              |   |                 |      | ۱. ;  |           | 63       | $\Box \Box$     |         |              |                     | $\Box$ |          |              |        |       | 113      |          |          | $\Box$   | $\Box$        | [            |          | $oldsymbol{oldsymbol{oldsymbol{oldsymbol{I}}}$ | $oldsymbol{ol}}}}}}}}}}}}}}}$ |          |
|            | 14         | 2            | L            |          |              | L  |              | L_                                      | Ш               |      |       |           | 64       |                 |         |              |                     |        |          |              |        |       | 114      |          |          |          |               | _]           | $\Box$   | $\bot$   | $\perp$   | _        |
|            | 15         | 11           |              |          |              | $oxedsymbol{oxedsymbol{oxedsymbol{oxed}}}$ |              | $oxedsymbol{oxed}$                      | $\Box$          |      |       |           | 65       |                 |         |              |                     |        |          |              | .      |       | 115      |          |          |          |               | [            |          | $\perp$  | $oldsymbol{oldsymbol{oldsymbol{oldsymbol{\Box}}}$   |          |
|            | 16         |              |              |          |              |  |              |   |                 |      | :     |           | 66       |                 |         |              |                     |        |          |              |        |       | 116      |          |          |          |               | _]           |          | $\bot$   | $\perp$   |          |
|            | 17         |              |              |          |              |  | L            | $oxed{\Box}$                            |                 |      |       |           | 67       |                 |         |              |                     | $\bot$ |          |              |        |       | 117      | $\Box I$ |          |          |               |              |          | $\prod$  | $\bot$  | $\Box$   |
|            | 18         | <u>L</u>     | <u></u>      | <u> </u> | L            | <u> </u>                                   |              |   |                 |      |       |           | 68       |                 |         | <u> </u>     |                     |        |          |              |        |       | 118      |          |          | _        | _             | _            |          | _  |   | _        |
|            | 19         |              |              | _        | L            |  |              |   |                 |      |       |           | 69       |                 |         |              |                     |        |          |              |        |       | 119      |          |          |          |               |              |          | $\perp$  | $\perp$   | _        |
|            | 20         | _            | <u> </u>     | L        | L            |  |              |   | Ш               |      |       |           | 70       |                 | 丄       | L.           |                     |        |          |              |        |       | 120      |          |          | $\perp$  |               | _            |          |  | $\perp$   | _        |
| L          | 21         | L            | L            | Ŀ        | _            |  | L            |   |                 |      |       |           | 71       |                 |         | L.           |                     |        |          |              |        |       | 121      |          | $\perp$  |          |               |              |          | $\dashv$                                       |   | $\Box$   |
|            | 22         | L            | L            | _        |              | L  | L.           |   |                 |      |       |           | 72       |                 | $\perp$ |              |                     |        |          |              | l: ; i |       | 122      |          | $\perp$  |          |               | $_{\perp}$   |          | $\perp$  |   |          |
|            | 23         | <u>L</u>     |              |          |              |  |              |   | Ш               |      | :     |           | 73       |                 |         |              |                     |        |          |              |        |       | 123      |          | $\perp$  | _1       |               |              |          |  |   | _        |
|            | 24         | <u> </u>     | <u> </u>     | _        |              | _  |              |   |                 |      | - : : |           | 74       |                 | $\bot$  |              |                     |        |          |              |        |       | 124      |          |          | _        |               | _            |          | _  | _   | _        |
| <u></u>    | 25         | _            |              |          | _            | <u> </u>                                   | <u> </u>     |   |                 |      |       |           | 75       |                 |         | <u> </u>     |                     | _ _    |          |              |        |       | 125      |          | _        | _        | _             |              | _        | _  | _   | _        |
|            | 26         | ļ            |              | L        | L            | <u> </u>                                   | <u> </u>     | _                                       |                 |      | 1     |           | 76       |                 | _       | $oxed{\bot}$ |                     |        | <u> </u> | _            |        |       | 126      |          |          | _        | _             |              |          | 4  | _   | _        |
|            | 27         |              | _            |          | _            | ļ  | Ļ.,          | _                                       |                 |      |       |           | 77       | $\perp$         | -       | L.           |                     |        |          |              | 2: 1   |       | 127      |          | _        | _        | _             |              |          | _  | _   | _        |
|            | 28         | L.           | <u> </u>     |          | _            | _  | <u> </u>     | _                                       |                 |      |       |           | 78       |                 |         | L_           |                     |        | -        | _            |        |       | 128      |          | 1        | _        | $\bot$        | _            | _        | $\dashv$                                       | $\dashv$  | _        |
|            | 29         | L.           | L            | L        | <u> </u>     | ļ  | Ļ.,          | _                                       |                 |      |       |           | 79       |                 |         | <u> </u>     |                     | _ _    | <u> </u> | <u> </u>     |        |       | 129      |          | _        | _ -      | _             |              |          | 4  | 4   | _        |
| <u></u>    | 30         |              | _            |          | <u> </u>     |  | <u> </u>     | _                                       |                 |      |       |           | 80       | $\vdash$        | 4       | L            |                     |        | ┦—       | <u> </u>     |        |       | 130      | _        |          | 4        |               |              | _        | $\dashv$                                       | $\dashv$  | 4        |
| <u> </u>   | 31         | _            | <u>L</u>     | <u> </u> | <u> </u>     | ऻ_   | <u> </u>     | <b>├</b>                                | Ш               |      |       |           | 81       | $\sqcup \bot$   | $\bot$  | ļ.,          | $\sqcup$            | _      | 4_       | <u> </u>     |        |       | 131      | _        | -        | _        | _             | _            |          | $\dashv$                                       | $\dashv$  | _        |
|            | 32         | <u> </u>     | <u> </u>     | <u> </u> | <u> </u>     | ऻ  | ⊢-           | <del> </del>                            | $\square$       |      | - 1   |           | 82       | $\vdash \vdash$ | $\perp$ | <u> </u>     |                     | -      |          | <b> </b>     |        |       | 132      | _        |          | _        | 4             | _            | _        | $\dashv$                                       | $\dashv$  | $\dashv$ |
|            | 33         | 1            | <u> </u>     | <u> </u> | <u> </u>     | _  | <del> </del> | <del> </del>                            | $\square$       |      |       |           | 83       | $\vdash \vdash$ | $\bot$  | <u> </u>     | $\sqcup \downarrow$ |        |          | <del> </del> | ::     |       | 133      | _        |          | -        | _             | _            | _        | $\dashv$                                       | $\dashv$  | _        |
|            | 34         | <u> </u>     | <u> </u>     | $\vdash$ | $\vdash$     | ⊢  | ┞-           | $\vdash$                                | $\sqcup$        |      | 1     |           | 84       | $\vdash$        | +       | <b>⊢</b> -   | $\vdash$            |        | +        |              |        |       | 134      |          | -        | -        | $\rightarrow$ |              | _        | $\dashv$                                       | $\dashv$  | _        |
|            | 35         | <u> </u>     | <u> </u>     | <u> </u> | <u> </u>     | ⊢  |              |   | $\vdash$        |      |       |           | 85       | $\vdash$        | _       | Ш            | $\vdash$            |        |          | <del> </del> | ;      |       | 135      | -        | -+       | 4        | $\dashv$      |              | _        | $\dashv$                                       | $\dashv$  | $\dashv$ |
|            | 36         | _            | <u> </u>     | _        | $\vdash$     | -  | -            |   | $\sqcup$        |      | -     |           | 86       | $\vdash$        | +       | -            | $\vdash$            |        | -        |              |        |       | 136      |          | _        | -        | _             | _            |          | +  | $\dashv$  | $\dashv$ |
| <u> </u>   | 37         |              | -            |          | ├            | $\vdash$                                   | -            | <u> </u>                                | $\vdash$        |      |       |           | 87       | $\vdash$        | _       | H            | $\vdash$            | _      | -        | ļ            |        |       | 137      | -        |          | -        | _             |              |          | $\dashv$                                       | $\dashv$  | $\dashv$ |
| <u> </u>   | 38         | <del> </del> | <u> </u>     | <u> </u> | <del> </del> | ├-   |              | ├                                       |                 |      |       |           | 88       |                 | -       | H            | $\vdash$            | +      | +        | $\vdash$     |        |       | 138      |          |          |          | -             |              |          | -  | $\dashv$  | 4        |
| <u> </u>   | 39         | <u> </u>     | H            | <u> </u> | <u> </u>     | +-   | ├-           | ├                                       |                 |      |       |           | 89       | $\vdash$        | -       | $\vdash$     | $\vdash$            | +      | 1        | $\vdash$     | . :    |       | 139      |          | _        |          | -             | _            |          | $\dashv$                                       | $\dashv$  | $\dashv$ |
|            | 40         | -            |              |          | -            | -  | ⊢-           | $\vdash$                                | Н               | _    |       |           | 90       |                 | +       | $\vdash$     |                     |        | +-       | -            | :      |       | 140      | _        | $\dashv$ | +        | $\dashv$      |              | 1        | -+   | -+  | $\dashv$ |
|            | 41         | ₩            | <u> </u>     | <u> </u> | ├-           | <u> </u>                                   | ⊢            | $\vdash$                                | $\vdash$        | _    |       | $\square$ | 91       | $\vdash \vdash$ | +       | $\vdash$     | $\vdash \downarrow$ |        |          |              | - 1    |       | 141      | 1        | $\dashv$ | _        | $\dashv$      | _            |          | -  | -   |          |
| <u> </u>   | 42         |              |              |          | ├            |  | ⊢-           | <b>├</b>                                | -               |      |       |           | 92       |                 | +       | $\vdash$     | $\vdash \downarrow$ | -      | -        | $\vdash$     | , :    |       | 142      |          | +        | $\dashv$ | $\dashv$      | <del> </del> | $\dashv$ | $\dashv$                                       | $\dashv$  | $\dashv$ |
| <u> </u>   | 43         | <u> </u>     |              |          |              |  | ⊢            |   |                 |      | - :   |           | 93       | $\vdash$        | +       | $\vdash$     | $\vdash \downarrow$ | +      | +        | $\vdash$     | 1      |       | 143      |          |          | $\dashv$ |               | _            | _        | $\dashv$                                       | $\dashv$  | $\dashv$ |
| <u> </u>   | 44         | <u> </u>     | <b> </b>     |          | ├-           | <del> </del>                               | ⊢-           | <del> </del>                            | $\vdash$        |      |       |           | 94       | -               | +-      | $\vdash$     | $\vdash \downarrow$ | +      | +        | $\vdash$     | 11     |       | 144      | -        | -        |          | -             |              | _        | $\dashv$                                       | $\dashv$  | $\dashv$ |
|            | 45         | <u> </u>     |              |          | -            | <u> </u>                                   | ├            | <del>  -</del>                          | $\vdash$        |      |       |           | 95       | <del>-  -</del> | +       | $\vdash$     | $\vdash$            | +      | +        | H            | . ;    |       | 145      | -        |          |          | -             | -            | $\dashv$ | +  | +   | $\dashv$ |
|            | 46         | 1            |              |          | ₩            | -  | ├-           | H                                       | $\vdash \vdash$ |      |       |           | 96       |                 | +       | $\vdash$     | -                   | +      | +        | Н            |        |       | 146      | -        | -+       | -        | _             | _            | $\dashv$ | $\dashv$                                       | $\dashv$  | $\dashv$ |
|            | 47         | ├            |              |          | $\vdash$     |  | <b>⊢</b> −   | $\vdash$                                | Н               |      | 1     |           | 97       |                 | +       | -            |                     | +      | +        | Н            |        |       | 147      | $\dashv$ | +        | -        | -             | _            |          | $\dashv$                                       | $\dashv$  | $\dashv$ |
| <b> </b>   | 48         | -            | $\vdash$     |          |              | ₩-   | ├            | $\vdash$                                | $\vdash \vdash$ |      | - 1   |           | 98       |                 | +       | -            |                     | -      | +-       | H            |        |       | 148      | 4        | +        | -        |               |              |          | $\dashv$                                       | $\dashv$  | $\dashv$ |
| -          | 49         | -            | <del> </del> | <b>-</b> | <del> </del> |  | ├            | -                                       | $\vdash$        |      | . :   |           | 99       |                 | +       | $\vdash$     | $\vdash \downarrow$ |        |          |              | :      |       | 149      | _        | _        | _        |               | _            | $\dashv$ | -  | $\dashv$  | $\dashv$ |
| L          | 50         | L            | L            | L.,      | <u> </u>     |  | L            | نــــــــــــــــــــــــــــــــــــــ | Ш               |      |       | L         | 100      |                 | 1_      |              | ᆜ                   |        |          |              |        |       | 150      |          |          |          |               |              |          |  | $\perp$   |          |